



# First record of *Uperodon globulosus* (Günther, 1864) (Anura, Microhylidae) in Rajshahi Division, Bangladesh

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## Abstract

*Uperodon globulosus* (Günther, 1864) has so far been recorded from 6 localities in Bangladesh over the past 3 decades. In June 2017, we found an adult female in a courtyard of a house in Jonail village (Natore district, Rajshahi division, Bangladesh), which is approximately 102 km southwest of the previous nearest previously known occurrence of this species.

## Key words

Balloon Frog; species distribution; Natore.

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## Introduction

*Uperodon globulosus* (Günther, 1864), a species belonging to the family Microhylidae and commonly known as the Balloon Frog, is characterized by its enormously distensible lungs that swell like a globular puffball, giving the appearance of an inflated balloon (Asmat 2009). This species is found in southern Nepal, northeastern India to Gujarat, southwestward to Karnataka and Kerala, India, and Bangladesh (Ahsan 2015). *Uperodon globulosus* is a nocturnal fossorial species that is found in forests and agricultural lands and breeds in shallow ponds and marshy wetlands following heavy rainfall (Khan 1987, Dutta et al. 2004, Asmat 2009, Ahsan 2015). These frogs move mainly by walking and/or hopping, and have the ability to float on water (Daniel 2002, Asmat 2009).

## Methods

We documented the species using a Canon PowerShot SX50 HS digital camera and deposited photographic

vouchers in the Professor Md. Kazi Zaker Husain Museum, Department of Zoology, University of Dhaka, Bangladesh. The specimen was not collected because it is protected by law. This species is categorized as Vulnerable under criteria B1ab(iii), according to IUCN Bangladesh (2015) and is a protected animal under Schedule I of the *Bangladesh Wildlife (Conservation and Security) Act*, 2012.

## Results

**New record.** Bangladesh, Rajshahi division, Natore district: Boraigram: Jonail village (24°16'39" N, 089°13'25" E; WGS84), Md. Mokhlesur Rahman, 18 June 2017, in courtyard of a house (photographic voucher number W14001a-b, 1 adult female).

**Identification.** Preliminary identification was done in the field by the authors, using the field guide by Hasan et al. (2014). This identification was later confirmed by Professor Mohammad Firoj Jaman. Prior to photographing the



**Figure 1.** Adult female *Uperodon globulosus* from Natore, Rajshahi division. Photograph by Md. Mokhlesur Rahman.

individual, it was observed inflating its body. This specimen agrees with the description in Asmat (2009), Hasan et al. (2014), and Khan (2015) by having a variable dorsal color within the range of variation known for the species (reddish brown to greenish grey or olive), a dirty whitish ventrum, a granular anal region, fingers not webbed (with the first finger shorter than the second), fingertips rounded, hind limbs short, and toes with rudimentary webs (Fig. 1).

Discussion

Since its discovery in 1980 from Madhupur forest, Mymensingh (Khan 1982, 2004), *U. globulosus* has been recorded from 6 localities in Bangladesh and with few sightings over the last 3 decades (Table 1). Mahony et al. (2009) recorded 2 juveniles from the same forest of Madhupur track in Rasulpur, Tangail district, and they also recorded 2 males from Savar, Dhaka. Another individual

was found from a paddy field of Berakuthi village, Barua, Nilphamari (Sarkar et al. 2012). Most recently, Reza and Perry (2015) documented this species from Milonchori, Bandarban (Table 1).

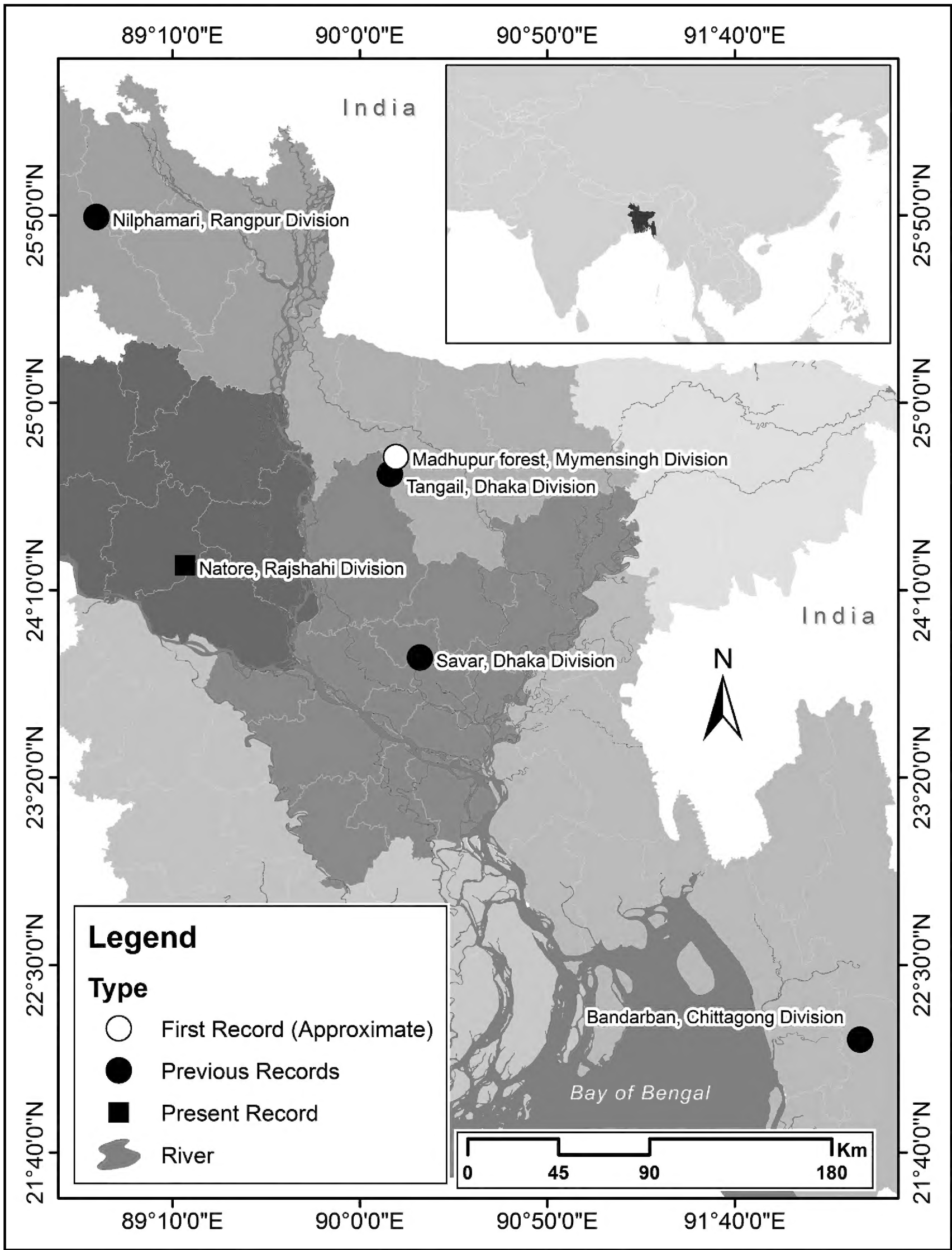
The habitat we report is dissimilar to previously recorded habitats (Table 1). Our new record expands the known geographic distribution of this species; this record is approximately 176 km south of Nilphamari, 115 km northwest of Savar, 102 km southwest of Tangail, and 390 km northwest of Bandarban (Fig. 2). Moreover, this new record might help in promoting more studies on the ecology, behavior, and other aspects of *U. globulosus*. Considering that this species occurs in a variety of different types of habitats, we conclude that gaps between known occurrences of *U. globulosus* are due to limited sampling rather than environmental restrictions. With further fieldwork, we expect to find additional records between the currently known occur-

**Table 1.** Known locality records for *U. globulosus* in Bangladesh.

Place	Latitude	Longitude	Habitat	Reference
Madhupur forest, Mymensingh	24°42' N *	090°09' E *	Barren patch	Khan 1982
Savar, Dhaka	23°52' N	090°16' E	Semi-urban	Mahony et al. 2009
Rasulpur, Madhupur, Tangail	24°41' N	090°08' E	Forest edge	Mahony et al. 2009
Berakuthi, Barua, Nilphamari	25°49'33" N	088°49'45" E	Paddy field	Sarker et al. 2012
Milonchori Hillside resort, Bandarban	22°10'04" N	092°13'24" E	Tropical forest	Reza and Perry 2015
Jonail, Boraigram, Natore	24°16'39" N	089°13'25" E	Courtyard	Present study

\* Geographic coordinates approximate (subsequently derived here).





**Figure 2.** Map showing the localities where *Uperodon globulosus* has been recorded. Colored areas represent divisions within Bangladesh.

rences and to be better able to describe the distribution of *U. globulosus* in Bangladesh.

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Authors’ Contributions

MMR and MMA collected the data, MMR and MFR wrote the text, and MMA made the analysis.

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